BRUHAT BANGALORE MAHANAGARA PALIKE

PACKAGE-7

NAME OF WORK : IMPROVEMENTS TO BALANCE ROADS AND DRAINS AT CHAMUNDESHWARI LAYOUT, NANJAPPA LAYOUT AND SURROUNDING AREAS IN WARD NO. 10 (DODDABOMMASANDRA), VIDYARANYAPURA SUB DIVISION.

Sl.No.	Description of work	Mesurement					Qty	Rate	Amount
		Unit	No	L	B	D			
1	KSRB 2-1.1: Earthwork in surface excavation in ordinary soil for leveling and lowering the ground manually (other than foundation of buildings, culverts, roads drains and trenches of pipe line and cables) and removing the excavated stuff to a distance not exceeding 50m and lift up lift 1.5, excavated surface leveled and neatly dressed disposed earth to be leveled after breaking of clods and neatly dressed as per specifications.Specification. No. KBS 2.1(a)/2.3.1(P.No.5-I.No.2.1)								
	Desilting drain								
	CHAMUNDESHWARI LAYOUT								
	1st Cross 2nd phase	Cum	2	108.60	0.80	0.40	69.50		
	2nd Cross Road	Cum	2	99.00	0.70	0.40	55.44		
	1st 'A Cross Road	Cum	2	170.00	0.60	0.40	81.60		
	3rd Cross Road	Cum	2	165.00	0.60	0.40	79.20		
	4th Cross Road	Cum	2	160.00	0.60	0.40	76.80		
	2nd Main Road	Cum	2	673.00	0.60	0.40	323.04		
	Venugopalswami temple 3rd Cross Road (unnamed)	Cum	1	97.00	0.60	0.40	23.28		
	Basic rate							157.00	
	Area weightage 6%							9.42	
	Total						**708.86**	**166.42**	**117969.15**
2	Removing B.S.slab of Drain and stacking.(P.No.25-I.No.5.32)								
	Closed Drain								
	Cover Slab								
	CHAMUNDESHWARI LAYOUT								
	1st Cross 2nd phase	Sqm	2	108.60	0.80		173.76		
	2nd Cross Road	Sqm	2	99.00	0.70		138.60		
	1st 'A Cross Road	Sqm	2	170.00	0.60		204.00		
	4th Cross Road	Sqm	2	160.00	0.60		192.00		
	Venugopalswami temple 3rd Cross Road (unnamed)	Sqm	1	97.00	0.60		58.20		
	Open Drain (Sides & Bottom)	Width=Perimeter of Drain in U Shape							
	CHAMUNDESHWARI LAYOUT								
	3rd Cross Road	Sqm	2	165.00	1.80		594.00		
	2nd Main Road	Sqm	2	673.00	1.80		2422.80		
	Sub Total						**3783.36**		
	Consider 5% Qnty for Removing						**189.17**		
	Basic rate							62.00	
	Area weightage 6%							3.72	
	Total						**189.17**	**65.72**	**12432.12**
3	Removing and refixing stone slabs of drains and pointing in CM (1:3) (P.No.25-I.No.5.33)								
	Closed Drain								
	Cover Slab								
	CHAMUNDESHWARI LAYOUT								
	1st Cross 2nd phase	Sqm	2	108.60	0.80		173.76		
	2nd Cross Road	Sqm	2	99.00	0.70		138.60		
	1st 'A Cross Road	Sqm	2	170.00	0.60		204.00		
	4th Cross Road	Sqm	2	160.00	0.60		192.00		

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	Venugopalswami temple 3rd Cross Road (unnamed)	Sqm	1	97.00	0.60		58.20		
	Sub Total								
	Consider 30% Qnty for Removing & Refixing						**766.56**		
	Basic rate						**229.97**		
	Area weightage 6%							76.00	
	Total							4.56	
4	Providing granite slabs of selected quality roughly dressed havinf a size of 7.5 cms thick and fixed in cement mortar (1:6) including fixing curing ete., complete.(P.No.25,I.No.5.31.1)						**229.97**	**80.56**	**18526.22**
	Closed Drain								
	Cover Slab								
	CHAMUNDESHWARI LAYOUT								
	1st Cross 2nd phase	Sqm	2	108.60	0.80		173.76		
	2nd Cross Road	Sqm	2	99.00	0.70		138.60		
	1st 'A Cross Road	Sqm	2	170.00	0.60		204.00		
	4th Cross Road	Sqm	2	160.00	0.60		192.00		
	Venugopalswami temple 3rd Cross Road (unnamed)	Sqm	1	97.00	0.60		58.20		
	Sub Total						**766.56**		
	Consider 5% Qnty for Refixing						**38.33**		
	Basic rate							628.00	
	Area weightage 6%							37.68	
	Total						**38.33**	**665.68**	**25514.18**
5	Providing granite slabs of selected quality roughly dressed havinf a size of 10 cms thick and fixed in cement mortar (1:6) including fixing curing ete., complete.(P.No.25,I.No.5.31.2)								
	Open Drain (Sides & Bottom)								
	Drain slab								
	CHAMUNDESHWARI LAYOUT								
	3rd Cross Road	Sqm	2	165.00	1.80		594.00		
	2nd Main Road	Sqm	2	673.00	1.80		2422.80		
	Sub Total						**3016.80**		
	Consider 5% Qnty for Refixing						**150.84**		
	Basic rate							779.00	
	Area weightage 6%							46.74	
	Total						**150.84**	**825.74**	**124554.62**
6	KSRB 300-1 : Earthwork excavation by manual means in ordinary soil involving an average horizontal throw upto 2meters and an average lift upto 1.5 m, excavated surface leveled and sides neatly dressed, the disposed earth to be levelled neatly after breaking of clods complete as per specifications.(P.No.142,I.No.19.1)								
	Road cutting portions								
	CHAMUNDESHWARI LAYOUT								
	2nd Cross Road	Cum	1	99.00	1.20	0.23	27.32		
	1st 'A Cross Road	Cum	1	66.00	1.20	0.23	18.22		
	Basic rate							82.00	
	Area weightage 6%							4.92	
	Total						**45.54**	**86.92**	**3958.34**
7	Lead for disposal of earth shall be payable at Carriage rates (Lead & Lift) by mechanical means including loading and unloading up to 15kms.(Refer Table. Page No.139)								

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	Considered same Qty vide I.No.1+I.No.6+ I.No.17	Cum					811.15			
	Average Weight of Earth (1.28 Ton/cum, Basic rate Rs.2.00 Tonne/Km.) For 15 Kms = (2.00 x 1.28 x 15)/-		38.40							
	KSRRB M100-1 Add loading & unloading (P.No.130,I.No.17.1)		68.00							
	Total rate per Cum		106.40							
	Basic rate									
	Area weightage 6%								106.40	
	Total								6.384	
8	KSRRB M400-17.Providing,laying, spreading and compacting crushed stone aggregates of granite/trap/ basalt to wet mix macadam specification including pre mixing the Material with water at OMC in mechanical mix plant carriage of mixed material by tipper to site, laying in uniform layers with paver in sub-base/ base course on well prepared surface and compacting with vibratory roller to achieve the desired density. complete as per specifications.MORTH specification No.406(Page No.158,I.No.20.18)						**811.15**	**112.78**	**91484.63**
	Road cutting portions									
	CHAMUNDESHWARI LAYOUT									
	2nd Cross Road	Cum	1	99.00	1.20	0.23	27.32			
	1st 'A Cross Road	Cum	1	66.00	1.20	0.23	18.22			
	Basic rate							1668.00		
	Area weightage 6%							100.08		
	Total						**45.54**	**1768.08**	**80518.36**	
9	KSRRB 500-1.Cleaning the existing WBM Road surface including removing of binding materials and other foreign matter with wire brushes and small picks sweeping with brooms or soft brushes and finally dusting with old gunny bags and bar or compressed air to receive bituminous treatment including cost of all materials, labhour, HOM of machineries complet as per specifications.(P.No.161,I.No.21.1)									
	Road cutting portions									
	CHAMUNDESHWARI LAYOUT									
	2nd Cross Road	Sqm	1	99.00	1.20		118.80			
	1st 'A Cross Road	Sqm	1	66.00	1.20		79.20			
	Basic rate							13.00		
	Area weightage 6%							0.78		
	Total						**198.00**	**13.78**	**2728.44**	
10	KSRRB 500-9.Providing and applying tack coat using 80/100 grade bitumen (VG 10) on granular base such as WBM surface hot bitumen primed at 4kg per 10 sqm heating bitumen in boiler with spray set (Excluding cleaning of Road surface) inlcuding cost of all materials, labhour, HOM of machineries complete as per specifications.(P.No.161,I.No.21.9)									
	Considered same Above Qty	Sqm					198.00			
	Basic rate							18.00		
	Area weightage 6%							1.08		
	Total						**198.00**	**19.08**	**3777.84**	

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11	KSRRB 500-11. Providing and laying bituminous macadam on prepared surface with crushed coarse as per design mix formula for base / binding courseincluding loading of aggregates with F.E. loader, hot mixing of stone aggregates and bitumen in hot mix plant,transporting the mixed material in tipper to paver and laying mixed materials, with paver finisher to the required level and grade,rolling by power roller to achieve the desired density,but excluding cost of primer/tack coat including lead,lift and cost of all materials,labour,HOM of machineries complete as per specifications MORTH chapter 5 Using 100/120 TPH capacity H.M.P with sensor paver Gr-II (50 mm to 75mm) with 3.4% VG - 30 Bitumen(P.No.162-I.No.21.11.2)								
	CHAMUNDESHWARI LAYOUT								
	2nd Cross Road	Cum	1	99.00	1.20	0.05	5.94		
		Cum	1	99.00	5.00	0.05	24.75		
	1st 'A Cross Road	Cum	1	66.00	1.20	0.05	3.96		
	Sub Total						**34.65**		
	Consider 5% qty for Profile correction and Dipression filling						**1.73**		
	Basic rate							5409.00	
	Area weightage 6%							324.54	
	Total						**36.38**	**5733.54**	**208600.52**
12	KSRRB 500-2.Cleaning the existing black topped surface with brooms,soft brushes and finally dusting with old gunny bags and/or compressed air to receive bituminous treatment including cost of all materials,labhour, HOM of machineries complete as per specifications.(P.No.161,I.No.21.2).								
	For Road surface								
	CHAMUNDESHWARI LAYOUT								
	1st Cross 2nd phase	Sqm	1	108.60	5.65		613.59		
	2nd Cross Road	Sqm	1	99.00	5.00		495.00		
	1st 'A Cross Road	Sqm	1	170.00	5.45		926.50		
	3rd Cross Road	Sqm	1	165.00	4.50		742.50		
	4th Cross Road	Sqm	1	160.00	4.70		752.00		
	2nd Main Road	Sqm	1	673.00	5.30		3566.90		
	Basic rate							3.00	
	Area weightage 6%							0.18	
	Total						**7096.49**	**3.18**	**22566.84**
13	KSRRB M500-10.Providing and applying tack coat using 80/100 grade bitumen(VG10) in boiler fitted with spray set distributor at the rate of 0.20kg per sqm on the existing prepared bituminous surface cleaned with mechanical broom. complete as per specification. MORTH Specifiacation clause No. 503.using Bitumen 80/100 (VG-10) on Primed surface.(P.No.162,I.No. 21.10.2) .								
	For Road surface								
	CHAMUNDESHWARI LAYOUT								
	1st Cross 2nd phase	Sqm	1	108.60	5.65		613.59		
	2nd Cross Road	Sqm	1	99.00	5.00		495.00		
	1st 'A Cross Road	Sqm	1	170.00	5.45		926.50		
	3rd Cross Road	Sqm	1	165.00	4.50		742.50		
	4th Cross Road	Sqm	1	160.00	4.70		752.00		
	2nd Main Road	Sqm	1	673.00	5.30		3566.90		
	Basic rate							9.00	
	Area weightage 6%							0.54	
	Total						7096.49	9.54	67700.51
14	KSRRB M500-19. Providing and laying bituminous concrete using crushed aggregates of specified grading,premixed with bituminous binder and filler,transporting the hot mix to work site,laying with a paver finisher to the required grade, level and alignment,rolling with smooth wheeled,vibratory and tandem rollers to achieve the desired compaction as per MORTH specification clause No.500.9 complete in all respects complete as per specifications. using 40/60 TPH capacity H.M.P with mechanical Paver Gr-II(30mm to 45mm) with 5.4% CRMB 55 (P.No.165- I.No.21.23.6)								
	CHAMUNDESHWARI LAYOUT								
	1st Cross 2nd phase	Cum	1	108.60	5.65	0.04	24.54		
	2nd Cross Road	Cum	1	99.00	5.00	0.04	19.80		

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	1st 'A Cross Road	Cum	1	170.00	5.45	0.04	37.06		
	3rd Cross Road	Cum	1	165.00	4.50	0.04	29.70		
	4th Cross Road	Cum	1	160.00	4.70	0.04	30.08		
	2nd Main Road	Cum	1	673.00	5.28	0.04	142.14		
	Profile correction & Pot Hole Filling	**No.*(1/2)*Length*(20%*Width)*Depth**							
	CHAMUNDESHWARI LAYOUT								
	1st Cross 2nd phase	Cum	1	108.60	5.65	0.04	2.45		
	2nd Cross Road	Cum	1	99.00	5.00	0.04	1.98		
	1st 'A Cross Road	Cum	1	170.00	5.45	0.04	3.71		
	3rd Cross Road	Cum	1	165.00	4.50	0.04	2.97		
	4th Cross Road	Cum	1	160.00	4.70	0.04	3.01		
	2nd Main Road	Cum	1	673.00	5.28	0.04	14.21		
	Basic rate							8502.00	
	Area weightage 6%							510.12	
	Total						**311.65**	**9012.12**	**2808657.12**
15	Providing Plastic to Bituminous concrete @ 8%								
	8% OF BC	Kg		0.08	311.65	117.00	**2917.08**		
	Basic rate							27.00	
	Area weightage 6%							1.62	
	Total						**2917.08**	**28.62**	**83486.69**
16	KSRRB M800-13.Road Marking with Hot Applied Thermoplastic Compound with Reflectrising Glass Beads on Bituminous Surface:- Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads at 250 gms per sqm area, thickness of 2.5 mm is exclusive of surface applied glass beads as per IRC:35. The finished surface to be level, uniform and free from streaks and holes complete as per specifications. (P.No.185-I.No.24.15)								
	CHAMUNDESHWARI LAYOUT								
	1st Cross 2nd phase	Sqm	1	108.60	0.10		10.86		
	2nd Cross Road	Sqm	1	99.00	0.10		9.90		
	1st 'A Cross Road	Sqm	1	170.00	0.10		17.00		
	3rd Cross Road	Sqm	1	165.00	0.10		16.50		
	4th Cross Road	Sqm	1	160.00	0.10		16.00		
	2nd Main Road	Sqm	1	673.00	0.10		67.30		
	Basic rate							512.00	
	Area weightage 6%							30.72	
	Total						**137.56**	**542.72**	**74656.56**
17	KSRRB M200-24. Dismantling of cement concrete pavement by mechanical means using pneumatic tools, breaking to pieces not exceeding 0.02 cum in volume and stock piling at designated locations and disposal of dismantled materials stacking serviceable and unserviceable materials seperately complete as per specifications. MORTH Specification No. 202(P.No.138- I.No.18.47)								
	CHAMUNDESHWARI LAYOUT								
	Venugopalswami temple 3rd Cross Road (unnamed)	Cum	1	97.00	3.90	0.15	56.75		
	Basic rate							781.00	
	Area weightage 6%							46.86	
	Total						**56.75**	**827.86**	**46976.92**
18	KSRRB M600-1. Construction of dry lean cement concrete mix CC1:5:10 with OPC cement @160Kgs, with 25mm and down size graded granite metal coarse aggregate at 0.86cum and fine aggregates @ 0.58cum Sub- base over a prepared sub-grade with (coarse and fine aggregate conforming to IS: 383) aggregate cement ratio not to exceed 15:1. Aggregate gradation after blending to be as per Table 600-1, cement content not to be less than 160 kg/ cum, optimum moisture content to be determined during trial length construction, concrete strength not to be less than 10 Mpa at 7 days, mixed in a batching plant, transported to site, laid with a paver with electronic sensor, compacting with 8-10 tonnes vibratory roller, finishing and curing complete as per specifications.MORTH Specification No. 601, Item No. 22.1, Pg No. 176								
	CHAMUNDESHWARI LAYOUT								

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	Venugopalswami temple 3rd Cross Road (unnamed)	Cum	1	97.00	3.90	0.15	56.75		
	Basic rate							3761.00	
	Area weightage 6%							225.66	
	Total						56.75	3986.66	226223.02
19	Cement concrete pavement.Construction of un-reinforced plain cement concrete pavement, thickness as per design, over a prepared sub base with OPC cement or any other type as per clause 1051.2.2 design mix M20/M30 , with 25mm and down size graded granite metal coarse aggregates and fine aggregtes , with superplastisiser @3lts confirming to IS9103-1999 Reaffirmed-2008 , mixed in a concrete mixer of not less than 0.6 cum capacity and appropriate weigh batcher as per approved mix design, laid in approved fixed side form work (steel channel, laying and fixing of 125 micron thick polythene film, wedges, steel plates including levelling the form work as per drawing). Spreading the concrete with shovels, rackers compacted using needle, screed and plate vibrator and finished in a continuous operation including provision of contraction, expansion, construction and longitudinal joints including groove cutting charges, joint filler, separation membrane, selant primer, joint sealant, admixtures as approved, curing compound, finishing to lines and grades as per drawing complete as per specifications. - M30 (at 360Kg per cum coarse aggregate @ 0.69cum and fine aggregate @ 0.46cum) Pg No.177 Item No.22.6.1									
	CHAMUNDESHWARI LAYOUT								
	Venugopalswami temple 3rd Cross Road (unnamed)	Cum	1	97.00	3.90	0.15	56.75		
	Sub Total						**56.75**		
	Consider 5% qty for camber correction						**2.84**		
	Basic rate							5866.00	
	Area weightage 6%							351.96	
	Total						59.58	6217.96	370480.05
20	KSRRB M800-13.Road Marking with Hot Applied Thermoplastic Compound with Reflectrising Glass Beads on Conrete Surface:- Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads at 250 gms and 2Ltr of Primer per sqm area, thickness of 2.5 mm is exclusive of surface applied glass beads as per IRC:35. The finished surface to be level, uniform and free from streaks and holes complete as per specifications. (P.No.192- I.No.24.57)								
	CHAMUNDESHWARI LAYOUT								
	Venugopalswami temple 3rd Cross Road (unnamed)	Sqm	1	97.00	0.10		9.70		
	Basic rate							647.00	
	Area weightage 6%							38.82	
	Total						9.70	685.82	6652.45
								Sub Total	**4397464.58**
	Preparation of DPR And Project management Consultancy Charges(2% of estimated cost)								100000
	Tender Premium 10% of estimated Cost								500000
	Miscellenious and rounding								2535
								TOTAL AMOUNT	**5000000**
								RUPEES FIFTY LAKHS ONLY	

ADMINISTRATIVE APPROVAL
Accorded For Rs. Rs 50 Lakhs only
Head of A/c P-3111
Div. Ref. No. 123/EA-18 Date 19/12/17
AE EE(BTP) 19/12

Technical Sanction
Accorded For Rs 50 Lakhs only
Head of A/C P-3111
CER NO :EE/BTP/EA-01/23/17-18

CE (YNK)

CERTIFICATE:

1) The work spot has been inspected and found to be necessary
2) The work spot comes under B.B.M.P
3) The provisions made in the estimate are necessary and minimum
4) The estimate is based on C.S.R of 2016-2017

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